

REMARKS

Claims 1-9 are pending. Claims 4-6 have been rejected under 35 U.S.C. §112, second paragraph. Claims 1-9 have been rejected under 35 U.S.C. §103. Claim 9 has been objected to because of an alleged lack of antecedent basis. Claims 4-6 and 9 have been amended. Claims 1-9 remain for consideration upon entry of the present Amendment. No new matter has been added.

The Examiner has objected to claim 9 because the term "the surface layer" allegedly lacks proper antecedent basis. Claim 9 has been amended to reflect the proper antecedent basis for the term "surface layer." Applicants respectfully request that the Examiner withdraw the objection to claim 9.

The drawings have been objected to as failing to comply with 37 C.F.R. 1.84(p)(5) as allegedly not including a reference character (reference numeral 7 in Figure 3) referred to in the description. The description makes no reference to reference numeral 7. Reference numeral 7 in Figure 3 is a typographical error and should be "17." Applicants enclose herewith replacement drawing sheets under cover of a separate letter to the Official Draftsperson in which reference numeral 7 in Figure 3 is changed to "17." Applicants respectfully request that the Examiner withdraw the objection to the drawings.

The Examiner has objected to the disclosure because the referenced patent on page 5, line 12, is allegedly not a valid U.S. patent. The paragraph containing the objectionable material has been amended to reflect the proper reference. Applicants respectfully request that the Examiner withdraw the objection to the disclosure.

Claims 4-6 have been rejected under 35 U.S.C. §112, second paragraph, as allegedly failing to set forth the subject matter that Applicants regard as the invention.

Claims 4-6 have been amended. In particular, the term "the glide strip" has been replaced with the language "said surface for slidably engaging the skin of the user." Applicants respectfully assert that such amendments to claims 4-6 sufficiently set forth the subject matter regarded as the invention within the meaning of 35 U.S.C. §112, second paragraph. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 4-6 under 35 U.S.C. §112, second paragraph.

Claims 1-7 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,056,221 to Thoene (hereinafter "Thoene"). The Examiner alleges that Thoene discloses the same invention recited in the claims. The Examiner further alleges that although Thoene does not disclose a polyvinyl pyrrolidone to polyurethane ratio of less than 3:1, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the glide strip to include a polyvinyl pyrrolidone to polyurethane ratio of less than 3:1 to decrease the risk of the polyvinyl pyrrolidone dissolving out.

Claim 1 of the present application recites a razor blade unit comprising one or more razor blades, a glide strip comprising a middle layer and a surface for slidably engaging the skin of a user, and a xerogel on the surface, wherein the xerogel comprises a homogenous mixture of homopolymers and copolymers of polyvinylpyrrolidone with polyurethane in which the ratio of the amount of polyvinylpyrrolidone to polyurethane is less than 3:1.

Thoene is directed to a razor having a slidable surface (glide strip) having a xerogel surface layer, wherein the xerogel layer comprises a mixture of polyvinyl pyrrolidone and polyurethane in a ratio of about (3-5):1. In other words, the xerogel comprises a mixture of one part polyurethane to 3 to 5 parts polyvinylpyrrolidone. Thoene indicates that the (3-5):1 ratio of polyvinyl pyrrolidone and polyurethane is preferred to achieve a low coefficient of friction and to obtain optimal resistance to wear. Thoene further discloses that while increasing the level of polyvinylpyrrolidone results in reduced friction, it also results in greater leaching of

the polyvinylpyrrolidone away from the xerogel, which in turn results in a shorter life span of the razor.

As stated by the Examiner, Thoene fails to disclose, teach, or suggest a polyvinyl pyrrolidone to polyurethane ratio of less than 3:1. Furthermore, Thoene teaches away from lowering the polyvinyl pyrrolidone to polyurethane ratio to less than 3:1, as recited in claim 1 of the present application. It is an object of the Thoene invention to provide a razor having a highly slidable surface when wet (i.e., a surface with a low coefficient of friction). Lowering the ratio as in the present invention would result in less polyvinyl pyrrolidone being present in the xerogel. Less polyvinyl pyrrolidone would result in a higher coefficient of friction. By having less polyvinyl pyrrolidone present and a correspondingly higher coefficient of friction, the glide strip of the present invention can provide the benefit of allowing an additive, such as aloe or vitamin E acetate, to be incorporated within the strip in a manner so that it will be capable of being deposited on the skin as the strip is worn away.

Thoene also explicitly teaches that his invention (ratio of (3-5):1) improves the resistance to leaching of polyvinyl pyrrolidone (see col. 4, lines 7-9) and that an improved resistance to the leaching of polyvinyl pyrrolidone is desirable. However, lowering the (3-5):1 ratio to below 3:1 as in the present invention further increases the resistance to the leaching of the polyvinyl pyrrolidone. Because lowering the ratio increases the resistance to the leaching effect but also increases the coefficient of friction (an undesirable feature according to Thoene), Thoene provides no motivation to lower the ratio below (3-5):1 as recited in claim 1.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Because Thoene teaches away from lowering the polyvinyl pyrrolidone to polyurethane ratio to less than 3:1, as recited in claim 1 of the present application, Thoene necessarily lacks the teaching, suggestion, or motivation to be

modified to produce an invention in which a polyvinyl pyrrolidone to polyurethane ratio is less than 3:1, as is recited in claim 1. Consequently, because Thoene lacks the teaching, suggestion, or motivation to be modified to produce the invention of claim 1, claim 1 is necessarily non-obvious. Applicants, therefore, respectfully request that the Examiner withdraw the rejection of claims 1-7 for this reason.

Claims 1-3, 7, and 8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Thoene in view of U.S. Patent No. 4,875,287 to Creasy et al. (hereinafter "Creasy"). The Examiner alleges that Thoene discloses the same invention recited in the claims. The Examiner further alleges that Creasy discloses the use of polyurethane/polyvinyl pyrrolidone blends in razor glide strip applications into which additional materials such as dyes, fragrances, and biologically active substances having therapeutic value can be incorporated. The Examiner then alleges that in view of Creasy, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include although Thoene does not disclose a polyvinyl pyrrolidone to polyurethane ratio of less than 3:1, it would have been obvious to one of ordinary skill in the art at the time of the invention to include polyurethane/polyvinyl pyrrolidone ration to which additional materials could be added to provide a shaving aid within the glide strip (aloe or fragrance) that would provide an added benefit to the user.

The recitations of claim 1 are presented above.

The teachings of Thoene are also presented above.

Creasy is directed to a shaving article for use in a wet shaving operation. The article includes at least one blade and a blade support having a skin-engaging portion adjacent to a shaving edge of the blade. The skin-engaging portion includes a hydrogel. The hydrogel material may be a polyvinyl pyrrolidone and polyurethane interpolymer. Dyes, fragrances, or the like may be incorporated into the polymer.

Creasy fails to disclose, teach, or suggest a razor blade unit comprising one or more razor blades, a glide strip comprising a middle layer and a surface for slidably engaging the skin of a user, and a xerogel on the surface, wherein the xerogel comprises a homogenous mixture of homopolymers and copolymers of polyvinylpyrrolidone with polyurethane in which the ratio of the amount of polyvinylpyrrolidone to polyurethane is less than 3:1, as is recited in claim 1.

To establish a prima facie case of obviousness for a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Because both Thoene and Creasy, individually or in combination, fail to disclose, teach, or suggest what Applicants recite in their claim 1, viz., a polyvinyl pyrrolidone to polyurethane ratio of less than 3:1, neither Thoene nor Creasy teach all of the claim limitations of Applicants' invention. Furthermore, because Thoene teaches away from the invention as recited in claim 1 for the reasons presented above, the combination of Thoene and Creasy is improper and cannot be used to render Applicants' invention as recited in claim 1 obvious. Consequently, because not all of the claim limitations are taught by the cited reference and because the references are not properly combinable, Applicants' claim 1 is necessarily non-obvious. Applicants, therefore, respectfully request that the Examiner withdraw the rejection of claims 1-3, 7, and 8 for these reasons.

Claims 4-6 and 9 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Thoene in view of Creasy as applied to claim 3 and further in view of U.S. Patent No. 5,603,161 to Welsh (hereinafter "Welsh"). The Examiner alleges that Thoene in view of Creasy discloses the invention substantially as recited in the claims and that Welsh teaches, *inter alia*, the use of a two color hydrogel shaving composite formed by applying a first coating of first color and a second coating of a second color as a wear indicator for a razor. The Examiner then alleges that it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the glide strip of Thoene to include different colored layers of a sufficient thickness to provide the user with a visual indication of the relative usage of the razor.

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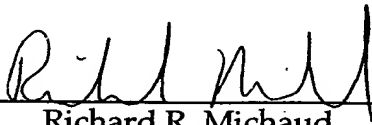
Claims that depend from a claim that is non-obvious are themselves necessarily non-obvious. Because claims 4-6 and 9 depend from claim 1, and because claim 1 is asserted to be non-obvious for the reasons presented above, claims 4-6 and 9, because they depend from claim 1, are necessarily non-obvious. Applicants, therefore, respectfully submit that claims 4-6 and 9 are allowable. Accordingly, Applicants respectfully request that the rejections of claims 4-6 and 9 be withdrawn.

Applicants believe that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein are allowable to Applicants. In view of the foregoing points that distinguish Applicants' invention from those of the prior art and render Applicants' invention non-obvious, Applicants respectfully request that the Examiner reconsider the present application, remove the rejections, and allow the application to issue.

If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is invited to telephone the undersigned.

Applicants believe that no fees are due with the submission of this Amendment. If any charges are incurred with respect to this Amendment, they may be charged to Deposit Account No. 13-0235 maintained by Applicants' attorneys.

Respectfully submitted,

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